Simplified read-aloud directions for Mary Hegarty's Perspective-taking Test

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Experimenter needs:

- a photocopy of the packet for each student. Packet includes one example page plus 12 test pages.
- *A large laminated copy of the example*
- Tape to tape up the laminated example
- A dry erase marker
- A stopwatch.

[Students begin with the packet open to the example. Ideally, the large version of the example should be attached to the blackboard or other surface in the front of the room.]

The next few pages are about your ability to imagine what something would look like from different viewpoints. This is an important skill in Earth Sciences.

On each page, you will see a picture of a group of objects in the top half of the page. [Hold up the example page, and point to the group of objects.] There are pictures of a cat, house, stop sign, car, stop light, tree and flower. [Point to the individual objects as you name them.]

The directions [point to the text in the center of the page] will tell you to imagine that you are standing by one object and facing towards another object. In the example, the directions tell you to imagine you are standing by the flower and facing the tree. [Hold up example page and point to picture of flower and then slide finger over to the tree.]

Try that now. Don't turn the paper, just imagine in your head that you are standing by the flower and facing towards the tree.

Now imagine that you are pointing to the cat. Don't actually point, just imagine that you are pointing to the cat, as you stand by the flower and face towards the tree.

[If you see students starting to rotate the packet.] Please don't rotate the paper. Try to do this all in your head.

I'm going to turn around so I am facing the same way that you are. [Turn so your back is to the class, and talk over your shoulder.]

In the example, the cat would be ahead of me and somewhat to my left. I'm standing here [point down], by the flower, I'm facing towards the tree [point ahead],

and the cat is over there [point about 60° to the left of straight ahead.] I'm just pointing over there to illustrate the example--you won't actually point when you are doing the activity.

[Turn back to face class.]

Once you have figured out the pointing direction, go to the circle at the bottom of the page. This is where you will give us your answer. *[Point to the circle at the bottom of the page.]*

In the circle, there will always be a solid arrow showing the direction that you imagine you are facing. In our example, this arrow goes from flower in the center of the circle [point to word "flower"] to tree [point to word "tree"] at the edge of the circle, because in the example you imagined you were standing at the flower and facing the tree.

To show us your answer, your job is to draw another arrow in the circle showing the direction you imagined pointing. In the example, we imagined pointing ahead and somewhat to the left [point about 60° to the left of straight ahead.] So we draw a new arrow, beginning at the center of the arrow circle, and going off somewhat to the left, as far to the left as we imagined the cat being. [Draw arrow with dry erase marker on the big example.]

Label this new arrow "cat" to show that this is the direction to the cat. [Label the arrow on the big example.]

Are there any questions about the example?

On each page the pointing direction will be different. For example, if the object I'm supposed to be pointing to had been to my right [gesture towards the right], I would have drawn the arrow over here somewhere [gesture drawing several lines from the center towards the right side of the arrow circle.]

If the object I'm supposed to be pointing to had been behind me, I would have drawn the arrow back here somewhere [gesture drawing several lines from the center towards the bottom of the arrow circle.] Does that make sense?

Please don't rotate the packet while you work.

And please don't put any lines or marks on the top part of the page where the pictures are [gesture to encompass the top half of the page]. Just show us your answer on the arrow circle at the bottom of each page [point to arrow circle].

You will have five minutes for this activity. Work carefully, and do as many pages as you can, but don't worry if you don't reach the last page.

Start now. [Start the stopwatch.]